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# MASSIVE ARSENOTHERAPY OF EARLY SYPHILIS

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THE TREATMENT of early syphilis by massive doses of arsenical preparations was first attempted by Erlich, but without success. However, the work of Hershfield, Hyman and Wanger[1] in 1931 showed that many such toxic substances could safely be given intravenously by a slow drip method. This prompted Dr. Louis Chargin of the Mount Sinai Hospital to treat early syphilis by an intravenous drip of large amounts of neoarsphenamine. In 1933, he began to treat a series of 25 early syphilitic patients by this method.[2] His work showed that such treatment offered great possibilities in the therapy of early syphilis, and in 1937, Drs. Hyman, Chargin and Leifer began a second series of 86 patients by the same method.[3] Due to the fact that one patient in this series died from hemorrhagic encephalitis and that 38 per cent of the series developed polyneuritis, it was decided to use mapharsen, a less toxic arsenical preparation, in place of neoarsphenamine.

In 1940, the Mount Sinai Hospital group published a report [4 5 6 7 8 9 10 11 12] on the treatment of 270 cases with napharsen by the intravenous drip method. They reported no fatality and no polyneuritis. The encouraging results of this series of cases prompted us to test the method at the Charles V. Chapin Hospital.

### *Procedure*

Our procedure is based as nearly as possible on the method described by Dr. William Leifer.[5] Each patient is given a thorough physical examination and the diagnosis is confirmed by serological tests (Wassermann and Hinton) and if possible, by a dark field examination. Each patient also has a blood chemistry, an icteric index, a complete blood count, and a renal function test (Mosenthal), before treatment is begun. Thus the patients selected for the massive arsenical treatment must be in good physical condition. Elderly patients are not considered suitable subjects for the treatment even though their laboratory findings and physical condition may be good. During the treatment the patient is observed carefully for reactions; his urine is examined daily; and he receives a high carbohydrate, high vitamin diet. In order to develop a uniform technique of therapy and maintain adequate observation, the same physicians carried out the treatment and follow-up of all our cases.

The intravenous solution is mixed in 600 cc. lots which contain 60 mg. of mapharsen in each 600 cc. of 5 per cent glucose in sterile distilled water. The solution is given at the rate of 60 to 90 drops per minute through a 20 gauge needle which has been carefully inserted into a vein on the volar surface of the forearm and securely fixed in place. During each of the five days of treatment, the patient receives 240 mg. of mapharsen in 2400 cc. of 5 per cent glucose solution by continuous drip over a period of about ten hours. He receives a total of 1200 mg. in the five days which is equivalent to twenty weekly routine treatments by the former method of therapy.

Unless a reaction occurs, the patient is allowed out of bed in the evening after each day's treatment has been completed. At the end of the five-day course of treatment, the patient has a complete recheck of the laboratory work which was done before the treatment. He is also kept in the hospital and observed for a period of three to seven days after treatment to be certain that no delayed reactions occur.

Each patient is instructed to return at weekly intervals for the first three months and at monthly intervals for six months or a year, to observe the changes in his serological reaction. He then is rechecked at less frequent intervals for a period of five years, if possible. Each patient has a lumbar puncture before the treatment is started and another about six months after treatment.

The serological examination consists of the standard Wassermann and Hinton tests which are done on serial dilutions of the patient's blood serum and repeated at stated intervals so that changes in the strength of the Wassermann reaction may be followed in each patient. This is used as an index of the regression of the infection in each case.

A group of the patients was given a course of ten weekly intramuscular injections of bismuth salicylate in oil after the intravenous treatment to observe its effect, if any, on the serological response.

In order to eliminate the discomfort of the continuous intravenous drip, the procedure was modified for the last 7 cases in our series. In this group, the mapharsen was given by syringe four times a day for five days. Each dose consisted of 60 mg. of mapharsen dissolved in 15 cc. of sterile distilled water. The patients were encouraged to take 3,000 cc. of fluid a day by mouth to promote adequate excretion.

### *Cases*

We have given massive mapharsen therapy to 68 patients who had primary or secondary syphilis. The group consisted of 34 males and 34 females. There were 31 colored patients and 37 white. The large number of colored patients is interesting in that it is far out of proportion to their number in the community, which is only about 6 per cent. The age of the group ranged between 16 and 56 years, with the majority of cases in the 20 to 30 year group.

### *Reactions*

The most serious reaction to massive arsenotherapy is hemorrhagic encephalitis. Two of our patients developed this reaction, one very severe and the other moderately severe. Both patients recovered after repeated lumbar punctures for spinal fluid drainage and large amounts of hypertonic glucose solution intravenously. It was interesting to note that in both of these patients, the spinal fluid Wassermann was positive during the acute stage of the encephalitis but promptly reverted to negative Wassermann after the acute process had subsided. This may be explained by the fact that a break in the meningovascular barrier has been perpetrated by the chemical encephalitis and allows certain protein elements of the blood to enter the spinal fluid, thereby producing a positive Wassermann reaction without the presence of actual infectious processes in the central nervous system.

Nausea and vomiting were frequent, especially in the female patients. Primary fever was common.

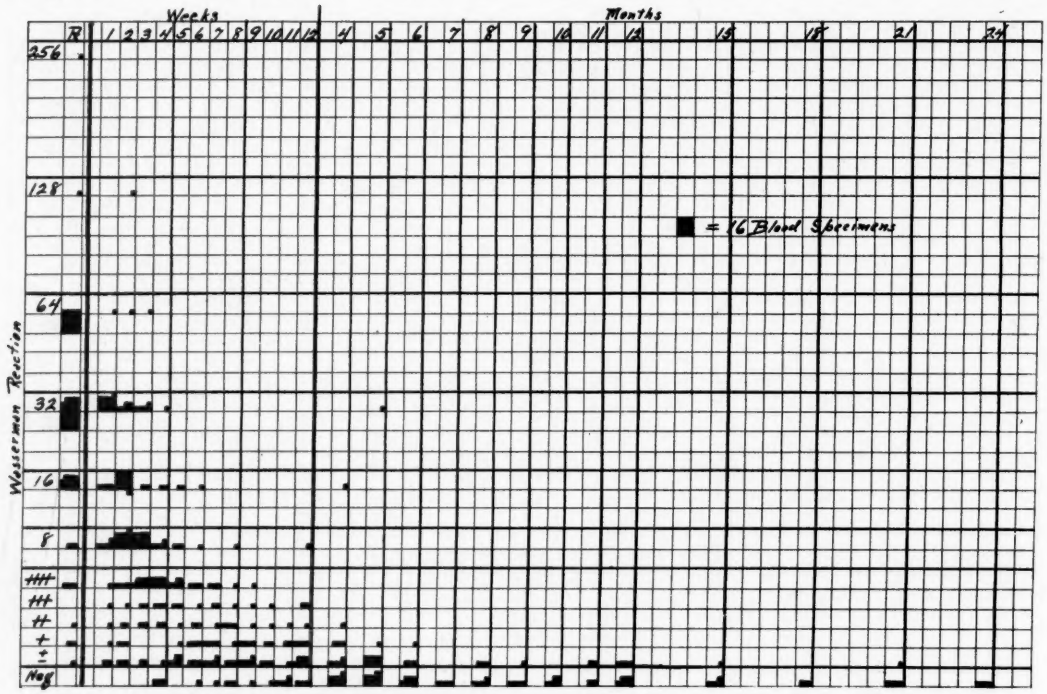


FIG. 2:—*Chart of all the Wassermann Reactions of all patients treated shows the gradual decline in the strength of the Wassermann after treatment.*

Peripheral neuritis occurred only in those who were treated by the continuous intravenous drip method. Figure (1) summarizes these reactions.

FIG. 1: *Toxic Reactions to Mapharsen Therapy in 68 Cases*

| | Number | Per Cent |
|---|---|---|
| Nausea and vomiting | 47 | 69.1 |
| Primary fever | 60 | 88.3 |
| Secondary fever | 3 | 4.4 |
| Toxicoderma | 4 | 5.9 |
| Dermatitis exfoliativa | 0 | 0 |
| Blood dyscrasias | 0 | 0 |
| Renal damage | 0 | 0 |
| Jaundice | 0 | 0 |
| Peripheral neuritis | 7 | 10.3 |
| Hemorrhagic encephalitis | 2 | 2.9 |
| Single convulsion | 0 | 0 |
| Disorientation | 1 | 1.5 |
| Fatality | 0 | 0 |

Although there has been no fatality in this series of 68 patients, the possibility of such an event is ever present. Therefore, due consideration must be taken before a patient is given the treatment, and it should be given only in a hospital where facilities are adequate for preliminary examination and careful observation.

### *Results*

In this series of 68 patients who received massive mapharsen therapy, 18 patients have been followed for one year or longer, with a maximum follow-up of two years in 4 cases. The six month follow-up was obtained in 29 cases. Eight cases which were treated less than six months previous to this report have been disregarded in computing all results. Cases which did not return for follow-up have also been discarded after their last visit.

The Wassermann and Hinton reactions on the blood of 50 per cent of the cases followed had become negative at the end of five months after treatment, and 80 per cent had become negative at the end of nine months. As is evident from the chart (Fig. 2), the serological reaction does not become negative immediately after treatment, but slowly becomes weaker over a period of months which depends upon the strength of the original Wassermann before the treatment was given.

Dividing the series into a group of 20 cases which received only mapharsen and another group of 40 cases which received, in addition, a series of 10 weekly intramuscular injections of bismuth, the only significant difference in results is that the Wassermann became negative more rapidly in the group receiving bismuth (Fig. 3). There was no significant difference in the percentage of negative Wassermanns in the two groups when nine months had elapsed after treatment.

The blood Wassermann and Hinton reactions eventually became doubtful or negative after one course of treatment in all of the cases that have been followed, with one exception. The exception was a female whose serology became negative eight weeks after treatment and then showed a progressively stronger reaction at three, four, and five months. At the latter time, she developed a secondary rash again and was given a second course of treatment. Due to the fact that no primary lesion could be found, this case must be regarded as a failure of treatment.

One patient was treated during the sixth month of pregnancy without any bad effects on the mother or fetus. She subsequently delivered a normal, full-

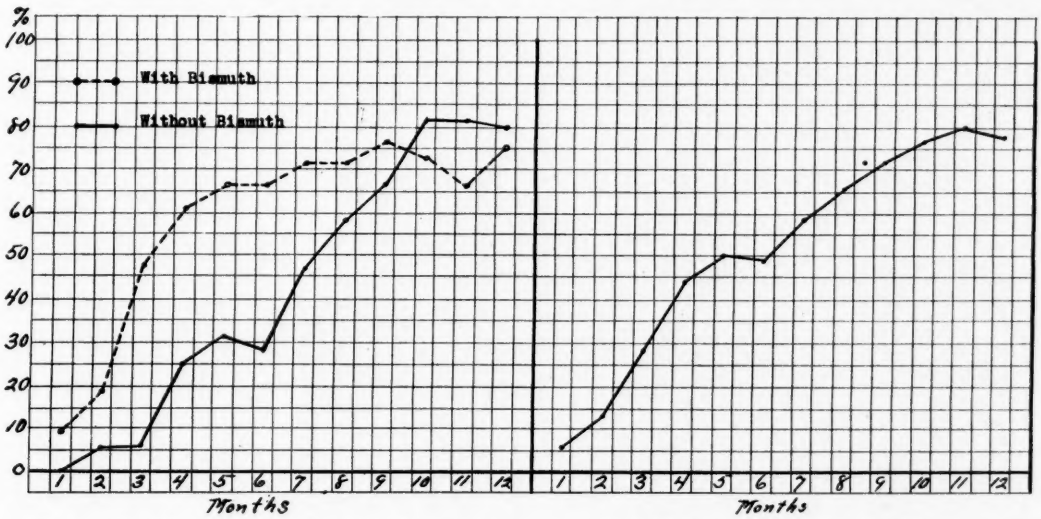


FIG. 3 *% of Cases Reaching Negative Wassermann* *% of All Cases Reaching Negative Wassermann*

term infant whose Wassermann was negative and who showed no evidence of congenital syphilis.

Lumbar puncture examinations were made on 26 cases at an interval of at least six months after treatment. The spinal fluid was found to be completely negative in all of these cases.

### *Summary*

A series of 61 patients was given massive mapharsen therapy for primary or secondary syphilis by the continuous intravenous drip method and 7 by the syringe method. There were no fatalities and only 2 cases of severe hemorrhagic encephalitis. The latter occurred in the group which received the continuous drip method. There was only one failure of treatment, which gives a rate of cure of 94.7 per cent in the 18 cases followed for one year.

### *Conclusions*

1. Our series is too small and the follow-up period too short to make definite conclusions regarding the effectiveness of this form of treatment.

2. From this series of cases and those already reported in the literature, it may be concluded that massive arsenotherapy of early syphilis is a relatively safe procedure if it is carried out in a hospital, if the cases are carefully selected, and if they are closely observed during treatment and for several days following treatment.

3. The follow-up of the patients is important in order that a proper estimate of the effect of massive arsenotherapy can be obtained. It is a difficult task and requires the interest and cooperation of the physicians and social agencies together with the venereal division of the Board of Health to locate and encourage patients to return for examination at intervals over a prolonged period of time.

### *Bibliography*

1. Hirshfeld, S.; Hyman, H. T. and Wanger, J. J.: Influence of Velocity on Response to Intravenous Injections, Arch. Int. Med. 47:259 (Feb.) 1931.
2. Chargin, L.; Leifer, W., and Hyman, H. T.: Studies of Velocity and Response to Intravenous Injections: Application of Intravenous Drip Method to Chemotherapy as Illustrated by Massive Doses of Arsphenamine in Treatment of Early Syphilis, J.A.M.A. 104:878 (March 16) 1935.
3. Hyman, H. T.; Chargin, L., and Leifer, W.: Massive Dose Arsenotherapy of Syphilis by Intravenous Drip Method: Five-year Observation, Am.J.M. Sc. 197:480 (April) 1939.
4. Baehr, George: Massive Arsenotherapy in Early Syphilis by the Continuous Intravenous Drip Method: The Preliminary Work with Neoarsphenamine, Arch. Dermat. & Syph. 42:239 (Aug.) 1940.
5. Leifer, William: Massive Arsenotherapy in Early Syphilis by the Continuous Intravenous Drip Method: Technic, Arch. Dermat. & Syph. 42:245 (Aug.) 1940.
6. Chargin, Louis: Massive Arsenotherapy in Early Syphilis by the Continuous Intravenous Drip Method: Toxicologic Manifestations, Arch. Dermat. & Syph. 42:248 (Aug.) 1940.
7. Hyman, H. T.: Massive Arsenotherapy in Early Syphilis by the Continuous Intravenous Drip Method: Clinical Considerations, Arch. Dermat. & Syph. 42:253 (Aug.) 1940.
8. Mahoney, J. F.: Massive Arsenotherapy in Early Syphilis by the Continuous Intravenous Drip Method: Resumé of Serologic Observations, Arch. Dermat. & Syph. 42:262 (Aug.) 1940.
9. Webster, Bruce: Massive Arsenotherapy in Early Syphilis by the Continuous Intravenous Drip Method: Follow-up Observations at New York Hospital, Arch. Dermat. & Syph. 42:264 (Aug.) 1940.
10. Thomas, Evan: Massive Arsenotherapy in Early Syphilis by the Continuous Intravenous Drip Method: Follow-up Observations at Bellevue Hospital, Arch. Dermat. & Syph. 42:267 (Aug.) 1940.
11. Sobotka, Harry; Mann, Walter, and Feldbau, Edith: Massive Arsenotherapy in Early Syphilis by the Continuous Intravenous Drip Method: Arsenic Excretion in the Urine and Concentration in the Blood, Arch. Dermat. & Syph. 42:270 (Aug.) 1940.
12. Rice, J. L.: Massive Arsenotherapy in Early Syphilis by the Continuous Intravenous Drip Method: Public Health Aspects, Arch. Dermat. & Syph. 42:283 (Aug.) 1940.

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**CAPTAIN LAWRENCE A. MORI, MC, to the rank of Major.**

# THE LUXURY OF SOCIAL INSURANCE

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THERE is general acceptance of the principle that no social security program can work satisfactorily unless there is relative stability of employment. There is considerable difference of opinion, however, as to the methods by which we may hope to minimize unemployment. Most of the outspoken advocates of formal social programs give the impression of being advocates of a high degree of government control of, and participation in, the economy. The statements of such advocates seem to imply broad government control, wide government planning, and effective enforcement of government plans, which in turn—despite the phrases used by the planners—mean the end of any hope of free private enterprise.

That is a serious thought, because no system can match free enterprise in the standard of living which it can create and in the effectiveness of the social security measures which it can support. Thus it is necessary to define the economic assumptions before there is any point in discussing the details of social measures to supplement the normal distribution machinery of the economy. We should set our goal at the highest level. We should not be content with a merely satisfactory degree of social security or with an economy which is merely workable. We should not be satisfied with anything less than the highest degree of social security and economic efficiency which we can practically hope to attain.

### *National Economy and Social Budgeting*

There is a sort of progression of the relationship between a nation's economy and its attitude toward social budgeting. When a community—using that word in the sense of an integrated economic group, whether it be tribe, city or nation—is very young economically it lives a hand to mouth sort of existence. All the effort of its members is needed to feed and clothe themselves and to sustain a relatively low standard of living, and there is little or no margin for savings or for luxuries. In that stage of economic progress unproductive members may be disposed of or they may be allowed to hang around to glean subsistence from the leavings of the others. Such a community can scarcely give much thought to social insurance.

As enterprising individuals are able to forego the current consumption of some part of their efforts—that is, to save—they create the beginnings of a capital investment which can be the means of increasing the effectiveness and productivity of their labor. The community is the gainer thereby, the standard of living improves, and as they get a toehold in the process of capital accumulation they are able to develop a wider margin between their productive capacity and the minimum subsistence level. From this margin they can improve their standard of living or they can accumulate more capital or they can pay more attention to the plight of the unfortunate, unproductive members. Probably they will do some of each. In this stage individual charity emerges, and as the stage develops there may be organized private charity and even some minimum form of public assistance. In this stage, however, every increment of saving that is used to improve the lot of the unproductive is not available to add to capital resources, and the self-interest of the productive majority will see that the relief measures are relatively low in order not to impair the accumulation of the capital which is to be the foundation for the more abundant life tomorrow. The process may not be consciously reasoned out, but that is the effect of the natural motives.

Throughout the entire progress of the community the condition of the unproductive members is in rather direct proportion to the general margin over subsistence which the productive organization of the economy allows. As the margin widens, the standard living of every productive member is raised (the lowest is probably raised more, relatively, than the average) and more and more attention is paid to the unproductive members. Organized relief comes as a marked improvement over unorganized charity, but the needs test plays a big part in order that the community's saving power may still be conserved to expand the capital resources and not be dissipated in payment to those who are not in actual need.

### *Reaching the Final Stage*

In the final stage of economic progress the capital accumulations of the past and the efficient productive organization of the present bring the productive margin so far above the subsistence level

that the community can afford substantial luxuries. Nearly everyone has extra material comforts and leisure in which to enjoy them. The existence of a substantial capital backlog removes pressure for new saving for investment. New investment has progressed far toward the point of diminishing utility and the community's capacity for saving can be turned in larger measure to current enjoyment and toward improving further the lot of the unproductive. At this stage in economic progress, when the community has a high capital investment and when the productive machinery is operating efficiently, the community can put into practice its ideals of social insurance; the needs test can be eliminated and presumptive need substituted as the test of the right to receive benefits. The community can afford a complete formal program of social security, and in all probability will establish such a program.

The final stage will be reached only if the economy is efficiently productive—and it cannot be held except by sustaining that efficiency. If at any time during that economic progress anything happens to impair the community's productive efficiency the result will be a cutting down of the margin over and above the subsistence level. Any reduction in that margin would mean an increase in pressure for savings or for current consumption and a decrease in the community's capacity or inclination to support its unproductive members. If the program which the community adopts at the top stage of its economic development has in it factors which impair the productive efficiency of the economy that margin will be reduced. If the impairment continues the community may reverse its economic history and step down from stage to stage until its ability and desire to care for unproductive members is largely destroyed.

Such a downward trend would not be the orderly result of a reasoned decision by the community to reverse its social program and to reduce its attention to unproductive members. An electorate does not easily give up benefits to which it feels entitled. The reversal of procedure is apt to be quite disorderly, accompanied by declining living standards and increased unemployment, with all the dangerous social and political implications of serious economic unrest. The emergence of mass unemployment would impose severe and possibly unbearable strains on the social insurance system; and the attempts to meet those strains might have most serious effects on our economic and political structure.

### *Importance of Timing Social Measures*

The timing of our social measures is important to the economic relationship. We have already committed ourselves to heavy cost burdens in winning this war, and we cannot avoid further heavy costs in implementing the peace to follow. The process of restoring our civilian economy and of preparing to utilize for peace the new inventions and developments of wartime will require substantial capital investments, which can be made only by foregoing the current enjoyment of a part of our current production. The costs to which we are already committed will make inroads into the amounts available for current consumption. The greater our commitments the less will be left for current use; and further commitments would mean a corresponding decrease in our living standards. This end is reached whether we meet our commitments by voluntarily reducing our consumption or by reducing the amounts which we save—for inadequate saving for capital investment will reduce the productive efficiency of our economy. There is a limit to the cuts in living standards which we can accept without serious social and political unrest, and we must be careful not to commit ourselves beyond that limit. Social security is one such commitment, and impatience for results, by extending the program before we have the capacity to support it, can carry us into serious economic, social and political disorders just as surely as direct interference with the economy.

### *Economic and Social Philosophy Inseparable*

For these reasons economic philosophy and social philosophy cannot be separated. A sound economy can make possible the highest development of social budgeting, but an advanced stage of social budgeting cannot exist without the sound economy. The economy must come first and the economy must be sound. Problems of distribution are important when productivity is high, but when productivity is lowered and there is less to distribute the problems of the unproductive lose their importance in the eyes of the productive voters. That is why social insurance cannot be considered by itself but must be related and subordinated to economic considerations. That is why we must have a sound economy of free private enterprise before we can afford the luxury of social insurance, because only the free economy can be efficient enough and productive enough to reach the final stage of economic development. We have been very near to having such an economy. We do not have it now and we will not have it after the war if social plan-

*continued on page 162*

# ESSENTIALS OF THE DIAGNOSIS OF HEART DISEASE

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THERE ARE several reasons why a diagnosis of heart disease should be made only when the evidence thoroughly justifies the opinion that damage has occurred or is occurring in the heart. Not the least of these reasons for diagnostic accuracy is the fact that laymen think of heart disease as a more or less hopeless condition, refractory to treatment and leading to early heart failure and sudden death. The profession is well aware that these fears are apt to be groundless, that sudden death occurs in a very small percentage of patients, that heart failure is often successfully relieved and that many patients with serious disorders of the cardiac apparatus may be so supervised as to live a normal length of life. The public is not well aware of these truths although increasing attempts at education through the press and radio are being made. As in almost all diseases early recognition of the difficulty is important; many patients have organic heart disease but are free of symptoms for years, later to succumb to rapidly progressive failure; in these patients early diagnosis, before the onset of symptoms, with the application of preventive restrictions frequently serves to postpone disability. Patients in this category can usually be truthfully told that intelligent management will add to their span of productive and comfortable years.

There are a few rather common erroneous ideas about certain diagnostic criteria: among these are the misconceptions that a heart is sound if it lacks murmurs, except in the presence of irregularity and rapidity which is taken to be indicative of myocardial damage, and that any of the so-called cardiac symptoms such as shortness of breath, edema and precordial pain indicate heart disease. It is well to emphasize that there are no absolutely pathognomonic SYMPTOMS of heart disease with the possible exception of classically typical episodes of angina pectoris and coronary thrombosis.

The data which we assemble in connection with the chief complaints, past illnesses and family history are of use but only as supplements to the main evidence. This is illustrated by the patient with a cardiac neurosis who may present the typical symptoms usually associated with cardiovascular disease but which on occasion may be non-cardiac in origin, as, for example, the dyspnea which is due to pulmonary lesions or to severe anemia, or the peripheral edema due to the local circulatory stasis of varicose veins or to the low serum protein level of malnutrition, or to nephritis, nephrosis and vitamin deficiency.

There are certain SIGNS that are pathognomonic of heart disease and are detectable without recourse to laboratory methods. These have been described so repeatedly by various authors that knowledge of them should be general. Various sources have been freely drawn upon in listing these signs.* To compile a list of pathognomic items of objective evidence implies a certain amount of dogmatism which is necessary in order to define the rules which will hold true in a majority of cases. In general any one of the items on the list may be accepted as reliable evidence of heart disease, and the absence of all of the items may be considered as proof that organic heart disease is not present. With the exception of electrocardiography the precise methods of cardiovascular investigation will add merely confirmatory evidence. There are rare exceptions to this, as, for example, the patient recently observed in whom the diagnosis of a persistent right-sided aortic arch could be made only by the roentgen ray picture. It is recognized that subtle and sometimes serious abnormalities may be discovered only by electrocardiography, nevertheless, for all practical purposes these ten criteria may be accepted, each in itself, though rarely present singly, as sufficient evidence to establish a diagnosis of heart disease, as follows:

1. Cardiac Enlargement.
2. Persistent Hypertension.
3. Marked Generalized Arteriosclerosis.
4. Diastolic Murmurs and Palpable Thrills.
5. Engorgement of the Neck Veins and Abnormal Pulsations.

*In particular, Chapter I, Synopsis of Diseases of the Heart and Arteries. George R. Hermann, C. V. Mosby Company 1941.

6. Gallop Rhythm.
7. Serious Disorders of the Cardiac Mechanism.
8. Dilatation of the Aorta.
9. Abnormal Retro-manubrial Dullness.
10. The Coronary Thrombosis and Angina Pectoris Syndromes.

### I. Cardiac Enlargement.

Enlargement of the heart, the result of hypertrophy or dilatation or both, indicates heart disease whenever it is sufficient to be detected by physical examination. The most reliable evidence of hypertrophy is the position of the cardiac apex. When this is outside the midclavicular line to the left one can feel certain that the heart is enlarged unless there are thoracic pathologic conditions which cause displacement. The fundamental stimulus to the production of hypertrophy is the cardiac dilatation which results from strain, as from overwork caused by a stenotic valve or by hypertension. When heart muscle cells become enlarged the capillary distribution to them is proportionately less and the speed of oxygen diffusion to them is diminished. Under such circumstances more time is required for recovery of the heart muscle cells after systole, consequently such hearts must beat slowly or failure will ensue more or less rapidly.

### II. Persistent Hypertension.

It is not necessary to say much about hypertension as evidence of cardiovascular disease. For this purpose it is sufficient to state that in persistent hypertension changes occur in all the arteriolar beds, particularly in the heart muscle, the brain and the kidney. The hypertensive state imposes an increased load on the heart; left ventricular strain is inevitable and left ventricular failure is a common result.

### III. Marked Generalized Arteriosclerosis.

Marked general arteriosclerosis evidenced by peripheral signs usually involves also the aorta and the coronary arteries to such an extent that it seems reasonable to conclude that heart disease is present. The absence of demonstrable arteriosclerotic changes in the peripheral arteries does not mean that the coronary system is normal since it may be predominantly involved. Likewise there may be predominant involvement elsewhere without generalized spread, as, for example, the markedly calcific vessels in the lower leg which are often found by x-ray in a symptomless patient. Although arteriosclerosis may exist as a patchy phenomenon it is safe to assume that when it is demonstrable in several areas it probably is generalized. Arteriosclerotic coronary artery disease inevitably impairs the structure as well as the function of the myocardium.

### IV. Diastolic Murmurs and Palpable Thrills.

Thrills, both systolic and diastolic, may always be accepted as pathognomonic of disease. Diastolic thrills are usually accompanied by diastolic murmurs but the reverse is not necessarily true. A pronounced diastolic murmur of mitral stenosis is usually accompanied by a palpable thrill whereas in aortic insufficiency a thrill is usually absent.

Distinct systolic thrills are the palpable counterparts of loud systolic murmurs and are quite significant. Occasionally an overactive but otherwise normal heart produces a vibration of the precordium which simulates a systolic thrill. Many apical systolic murmurs are the result of a relative dilatation of the mitral ring rather than the sequellae of true valvulitis. Systolic murmurs may be entirely extra-cardiac in origin. A systolic thrill or murmur in itself cannot be included in the list of reliable diagnostic signs but certain systolic murmurs and thrills are significant. A thrill and murmur over a peripheral artery suggests arterio-venous aneurysm. A systolic thrill and murmur over the base of the heart to the left with diminution or absence of the pulmonary second sound are usually due to congenital pulmonary stenosis. A similar thrill and murmur maximal in the midsternal region with greatest transmission towards the right often indicates a congenitally defective interventricular septum. Similar findings in other locations suggest other congenital lesions. A systolic murmur and thrill in the aortic area especially in the presence of a slow, plateau-type of pulse, with a diminution in the aortic second sound, indicate aortic stenosis.

### V. Engorgement of The Neck Veins and Abnormal Pulsations.

Engorgement of the neck veins, especially when they remain full with the patient in the upright position, usually indicates heart disease and is due to the increased venous pressure which accompanies weakness of the right ventricle with the back pressure phenomenon of congestive failure. Occasionally engorgement of the neck veins is the result of local stasis in the superior vena cava by abnormal pressure in the mediastinum. When engorgement of the neck veins is due to congestive heart failure there are other evidences of venous stasis to be found in other parts of the body ordinarily, such as edema, engorgement of the liver and cyanosis.

Abnormal cardiac pulsations in the left anterior axillary line in the fifth interspace may be taken as evidence of enlargement of the heart; when pulsations are present in the precordial area they are usually due to abnormal activity of a dilated right ventricle or to impingement of the pulmonary conus against the anterior chest wall by reason of right ventricular hypertrophy. Enlarged and tortuous intercostal arteries may occasionally produce visible and palpable pulsations. Sources of error are the abnormal situations of the cardiac apical impulse due to displacement of the heart by fluid or air in the right chest or by atelectasis and collapse of the left lung. More rarely there may be precordial and parietal adhesions involving the root of the aorta with consequent abnormal pulsations.

### VI. Gallop Rhythm.

Marked gallop rhythm is a reliable sign of myocardial damage, usually the result of intrinsic disease of the left ventricle or both ventricles, but may be produced by severe anemia and by prolonged infection. Gallop rhythm consists of three distinct heart sounds occurring with each cardiac contraction, usually at a heart rate increased above normal. Above the rate of 80 and especially above 100 the treble sounds resemble the galloping beats of horses' hooves. Below a rate of 80 the same three sounds have largely lost the resemblance to a gallop. Two of the three sounds of gallop rhythm are the normal first and second sounds of the heart, the third sound is the unusual one and may be of various origins. When it comes just before the first sound it is called presystolic gallop rhythm. Most often it comes shortly after the second sound, producing the proto-diastolic gallop rhythm. Sometimes it comes between the second and first sounds and is known as the meso-diastolic gallop rhythm. Rarely it comes during systole to be known as systolic gallop rhythm. Accurate differentiation of these types is frequently impossible. The mechanism giving rise to presystolic or proto-systolic gallop rhythm at relatively slow rates may produce the opposite type at very fast rates. Thus the simple designation "gallop rhythm" may suffice for most purposes. The proto-diastolic gallop rhythm is actually much more common than the others.

Although the mechanism of the production of the abnormal third sound is not definitely known it does accord in time with the normal third sound of the heart and there are other reasons for presuming that this abnormal sound is, as a rule, a much accentuated third heart sound. A simple physiological increase in the mechanism of the third sound production may be found normally after exercise or with the excessive heart activity of neuro-circulatory asthenia, and is explained by rapid dilatation of the ventricles with very forceful flow of blood from the auricles, which is accompanied by an opening snap of the mitral valve and a rebound of the blood from the ventricular wall. Proto-diastolic gallop rhythm is frequently heard in mitral stenosis in which case it is possible that the stiffness of the diseased mitral valve produces the third sound by its vibration early in diastole.

The most common and important condition in which gallop rhythm is found is cardiac weakness and dilatation especially that of the left ventricle; the gallop rhythm may or may not precede actual signs of failure. The mechanism of the third sound in this condition is probably that of the transmitted shock against the wall of the dilated ventricle caused by the rushing in of the blood stream from the engorged auricle under considerable pressure early in diastole. This explanation is supported by the fact that one of the most striking signs which accompanies and coincides in time with the third heart sound is an additional cardiac impulse against the chest wall in the region of the apex; sometimes this impulse is more pronounced than the third sound itself.

All of the diastolic gallop rhythms have essentially the same significance but systolic gallop rhythm is unimportant. The extra sound is apt to be a click or a snap different from the normal heart sounds and its cause is unknown; perhaps it is due to deformities or defects of valves or cordi tendiniae, of pericardium or pleura. Often gallop rhythm disappears during digitalis therapy only to reappear later if the drug is omitted or if myocardial weakness becomes more pronounced. Gallop rhythm is less significant in the presence of bundle branch block, atrio-ventricular block, mitral stenosis, aortic insufficiency and hypertension. Nevertheless, its presence justifies the diagnosis of myocardial disease. Gallop rhythm must be differentiated from the third heart sound of adolescence and the uncommon sounds sometimes produced by chest deformities.

### VII. Serious Disorders of The Cardiac Mechanism.

Important arrhythmias such as auricular flutter, auricular fibrillation, heart block et cetera are so very rarely present in normal hearts that their presence may be taken as evidence of heart disease.

In this category also is placed pulsus alternans which is usually detectable only while taking the blood pressure but in the most extreme cases shows definite alternate weak and strong beats in the palpable arteries. Disturbances of the mechanism with regular rhythm, such as paroxysmal auricular tachycardia often occur in normal hearts and should not be taken as definite evidence of heart disease.

### VIII. Dilatation of The Aorta.

In the absence of hypertension an abnormally accentuated ringing aortic second sound, especially when there is also an aortic systolic murmur is indicative of dilatation or sclerotic pathological changes, or both, in the vicinity of the root of the aorta. This sign is often due to luetic aortitis and also occurs from simple degenerative changes about the aortic ring, sometimes involving the orifices of the coronary arteries. Confirmatory evidence of aortic dilatation by the roentgen ray can usually be obtained.

### IX. Abnormal Retro-Manubrial Dullness.

Conspicuous abnormal dullness beyond the borders of the sternum at the base of the heart and increased palpability and visibility of the aortic pulsations in the supra-sternal notch usually signify pathologic processes involving the aorta, which excluding aortic aneurysm located well away from the ascending aorta, are apt to involve the circulation of the myocardium itself through diminution of the coronary flow.

### X. The Coronary Thrombosis and Angina Pectoris Syndromes.

Angina pectoris and the coronary thrombosis syndromes constitute irrefutable evidence of heart disease and either one of these, when clearly typical and in the absence of other signs, must occasionally be accepted as the *only* evidence of heart disease.

In general, heart disease may be diagnosed if one of these ten criteria is present. Usually, however, there are several corroborative findings. When none of these can be found there is reasonable certainty that significant heart disease is not present. In the absence of all of these signs cardiac symptoms must be considered as a part of functional rather than organic heart disease.

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## LUXURY OF SOCIAL INSURANCE

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ning has its way. Too much government regulation and government participation in the economy can impair its productivity to a point where the community will no longer be willing to consider the luxury of social insurance. Therefore the order, both in time and importance, must be first a sound efficient economy, and second the program of social insurance; and any attempt to reverse that order will defeat itself.

Today we are in a position very much like that of two hundred years ago. There are influential groups who would have our government put too much weight on its own economic influence and not enough weight on the constructive forces of natural human instinct. Two centuries ago the barriers which government imposed against normal incentives held down economic development until the barriers were broken by the forces of which Adam Smith was the intellectual spearhead. The breaking of the barriers made possible the Industrial Revolution and tremendous increases in the living standards of all. In recent years our economic development has again been hampered by artificial government-imposed barriers. Some of them, like tariff walls, have been imposed at the insistence of business men themselves, but they are none-theless harmful. We cannot return to a laissez-faire economy; we do not need to do so. Continual government policing is necessary. It is the widespread government intervention in business policymaking and business administration—as distinct from policing—which can bring unfortunate results. Not until we have less government intervention in these respects, rather than more, will society be able to realize the potentialities of free private enterprise. If that time comes, if we successfully shoulder the burdens of post-war reconstruction and readjustment, if we establish the atmosphere of reasonable confidence and understanding between the leaders of labor and management which alone can restore the political feasibility of rebuilding our economy around the profit motive, then we can approach the problems of social insurance with real hope of building a sound social security program. Unless we can do those things to a reasonable degree there is not much basis for optimism toward our future.

We *can* do them. Wartime hardships can restore to our nation and to the world a sense of values which was lost in the years before the war. We are about to enter a period of public discussion which can lead to reasonably sound decisions on the economic issues; and the urgency of the times can bring forth leaders capable of carrying out those decisions. The soundest statement in the Beveridge Report appears in the last paragraph: "Freedom from want cannot be forced on a democracy or given to a democracy. It must be won by them."

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# The RHODE ISLAND MEDICAL JOURNAL

*Owned and Published Monthly by the Rhode Island Medical Society,*
*106 Francis Street, Providence, Rhode Island*




## SYPHILOPHOBIA

FOR AT LEAST a generation we doctors have had it drilled into us that syphilis is of frequent occurrence and a great menace. We have been told of its protein manifestations and taught to suspect it in all unusual conditions.

Cancers of the mouth have had delayed treatment while tests were made for syphilis or treatment for the latter was carried out when there was positive serology. One surgeon was accustomed to keep all hemorrhoid cases filling ward beds until negative Wassermanns were obtained. A striking case presenting symptoms of bile obstruction was given treatment with heavy metals for years because of congenital lues. Finally when the liver was well ruined operation showed there had been obstruction.

Of recent years a national hue and cry has convinced the public of the great prevalence and grave danger of this plague. It has been written up in the lay press as much or more than in the medical publications. As a result the hunt for the treponema pallidum has assumed immense proportions. Not only does every youngster called up to the armed forces have to give his blood but every nice boy and girl wishing to marry have to "prove" that they are immaculate in this respect.

Now it is well worth while that syphilitics shouldn't marry. No more (to reach for ideals) should mental defectives, the tuberculous, or the vast number with various types of nervous troubles. Why not before the marriage license is issued demand an I. Q. test, X-ray of the lungs, and a mental hygiene examination?

The answer in the opinion of many is our national tendency to overemphasis. We have whooped up the syphilis scare with a din comparable to our fire sirens which are seldom silent in our cities.

Most of us have wondered why in our practice we have not encountered the syphilitic scourge we have been told about. As we have run hospital services and taken routine Wassermanns, lues has still been not in great evidence. We have been told by the physician in charge of the health of a large university that in many years, with thousands of students, he has had reason to believe that this disease has been almost non-existent there.

And why such a small harvest when we have been authoritatively told of such a large planting? Smillie in the Journal of the A. M. A. has given a good answer. It is largely the old story of the misinterpretation of statistics, "Syphilis in the U. S. primarily a negro problem." Florida with a large negro population has a syphilis rate of 5.3% in white men, 40.6% in negroes. Rhode Island, 0.9% in white, 9.2% in negroes. Dr. Bell in his article in this number of our JOURNAL, written before

Smillie's article had appeared noted that with 6% of our population black his series of syphilitic cases were practically 50% negroes.

Smillie says, "These data show that most of the popular propaganda that has been used in promoting syphilis control in the U. S. has been highly misleading. 'One person in ten will have syphilis' is a popular saying but it is untrue. The incidence of syphilis among white men in the greater part of the nation is low and is limited for the most part, in the white race, to the lowest classes of society."

Are the faces of some of our Health leaders red? Once again they have done their best to make skeptics of us all. Human energies and money are limited, war statistics to the contrary notwithstanding. If we waste our strength in one direction we will inevitably let up in another. Let's get realistic about syphilis.

## SOCIAL INSURANCE

In this issue of the JOURNAL there is published an excellent study of the underlying factors involved in social insurance. We commend the article to your reading for when Congress reconvenes this month there will undoubtedly be much discussion of the Wagner-Murray-Dingell act which spread its extensive program on the legislative records last June.

On the one hand there is certain to be pressure from social security planners as they outline an over-all scheme for the masses which presumably will end want. Support of the Wagner measure has already been announced in the press by labor leaders whom we suspect are happily looking to the expansion of social security as an easy solution of their problem instead of facing their real task of finding employment at fair wages for the returning soldiers, as well as for the citizens at home who have been dislocated by the war effort.

From clear thinking business and professional leaders, on the other hand, should be forthcoming sound counsel to guide our Congress lest the initiative which has made this country great be stifled, and lest the sound economy upon which any successful program is established be overlooked. It may be more blessed to give than to receive, but we suspect that the principle of charity is not the motivating force of the social planners.

We can point to no better example of the desire of the American people to solve their own problems to their own satisfaction than the growth of the Blue Cross hospital service in Rhode Island. Here is a non-profit organization which borrowed funds to start its work four years ago, which carried on its program with a minimum of salesmanship and advertising, and which today has an enrolment of more than one-fifth of the population of this State!

The soundest statement of the Beveridge report was indeed the one that "freedom from want cannot be forced on a democracy or given to a democracy. It must be won by them."

## HOLMES AND IRVING

In a recent number of the *New England Journal of Medicine* Frederick C. Irving has an article on Oliver Wendell Holmes and Puerperal Fever written in the delightful manner familiar to the readers of Safe Deliverance.

This year is the anniversary of the paper which so authoritatively summed up the facts proving the nature of this disease. We hope many physicians will be moved to read or reread this article of which all knowing Americans are so proud.

In those days "folks liked their doctors musty like their cheese." This explains why Holmes was not a successful practitioner even though with him "small fevers were gratefully accepted." He could write The Chambered Nautilus and The Autocrat of the Breakfast Table. For years his lecture room at the Harvard Medical School was filled with visitors to his regular classes, come there to hear the whimsical way in which he could make even the dull facts of anatomy charming.

He could not write even a scientific paper on a loathsome disease without making it pure literature or even poetry—

> "Where facts are numerous and unquestionable and unequivocal in their significance, theory must follow them as it best may, keeping time with their step, and not go before them, marching to the sound of its own drum and trumpet."
>
> "No man makes a quarrel with me over the counterpane that covers a mother with her newborn infant at her breast."
>
> "We do not deny that the God of battles decides the fate of nations; but we like to have the biggest squadrons on our side, and we are particular that our soldiers should not only say their prayers, but also keep their powder dry."

One more quotation and we are through. Even a letter to a casual acquaintance would be certain to have a pleasing fantasy. This is in our possession—

> Dear Dr. —
>
> I have made up my mind that I must and will have rest from excitement and overwork. Old

doctors, old poets and old men are getting scarce and though the one I have charge of is among the least important, I find he is worth my caring for a little longer. And as he is very tired just now, I order him to keep absolutely quiet for the present.

Yours very truly,

O. W. HOLMES

Dr. Irving, dwelling in Dr. Holmes' Boston, is the same rare combination of physician and literary man.

## SIGN HERE, DOCTOR!

Additional fuel oil? Have your doctor sign . . . oh, it is gasoline you wish for a motor trip for your health. No matter—just have your doctor sign special form 3784x. Perhaps you are short on your vitamins, or orange juice doesn't agree with you? Well, why don't you get a doctor's certificate and take it to your ration board so that you may get more red points for meat, or blue points for canned pineapple juice? You're tired and would like a rest? Didn't you know that you can get sickness insurance benefits while you are out ill? All you need is a certificate from your doctor. Or perhaps your job doesn't agree with you when you know you can get more money elsewhere. In that case you can get clearance if you show your present work is injurious to your health. Get a certificate from your doctor. What do you mean you can't get a certificate from your doctor? Do you mean to say that he has enlisted in the Army and is with the forces invading Sicily? He can't do that to you. Your health is important, and besides you have got to get a doctor's signature these days to get anything!

## MIDDLE CLASS AMERICA

To attempt a practical application of tax policy and Government spending to the middle class American, let us consider the American medical profession as a part of our economy.

We all know that the emergency of illness is one of the worst hazards of the family of average means. Proposals for Government-supported medical services can therefore be dressed most effectively "in the language of the true humanitarian."

It is not difficult for any of us, now that the Treasury Department has recommended an increase of $12 billion in the tax load, to imagine an income tax for the average American family which might make payments for private medical service impossible.

There is now pending in Congress a proposal for the Government to spend more than $3 billion on medical and hospitalization service.

That $3 billion is a quarter of the tax increase sought by the Administration. So with the one hand the Government would take away from the middle class American his ability to provide private medical care for himself and his family, and with the other it would offer him Government hospitalization and medical care.

Physicians in private practice would find their incomes from private sources at the vanishing point. They would have to seek Government employment. Thus, in this vital matter of hospitalization and medical care, the individual American, as well as the professional man, would be thrown on the mercy of the Government or put in the clutches of the Government, however you want to look at it. Think of the blow to American individualism that this one element of the problem threatens!

—*The Providence Journal*, August 5, 1943

## INDEX OF ADVERTISERS

# ESTIMATING THE DOCTOR'S INCOME TAX

JOHN A. O'CONNELL

The Author. *Chief, Income Tax Division, Providence Office, Collector of Internal Revenue*

Q. Does every doctor have to file an estimate of 1943 income taxes, or only the doctor on a salary basis?

A. Yes; the following persons are required to file a Declaration on or before Sept. 15th:

(a) Those not subject to the withholding tax whose gross income for the year can reasonably be expected to be such as to require the making of an income tax return (that is, those anticipating a gross income of $500 or more if single, or $1200 or more if married.)

(b) Those subject to the withholding tax, but whose wage or salary can reasonably be expected to exceed $2,700 if single, or $3,500 if married, or did exceed such amounts for the previous year.

(c) Those subject to the withholding tax, but whose income from sources other than wages or salaries can reasonably be expected to exceed $100 and whose gross income be such as to require the making of an income tax return, or did exceed $100 in the previous year and an income tax return was required to be filed, or would have been required if the marital status had been the same.

(d) Those required to make a return for 1942 whose gross income from wages or salaries in such year was greater than can reasonably be expected to be received from this source in 1943.

Q. What about the tax installments paid by the doctor last March and June?

A. The amounts paid on the 1942 liability are credited when the Declaration of Estimated Tax for 1943 is filed September 15.

Q. What about the Victory Tax as applied to the doctor?

A. The Victory Tax is imposed on individuals at the rate of 5 per cent on all Victory Tax net income in excess of $624 a year. Victory Tax net income is practically gross income, except for individuals engaged in trade or business; for although there are deductions allowed against gross income, they are allowed only to the extent connected with trade or business except that:

(1) The deduction for alimony is allowed.

(2) The deduction for unlimited contributions is allowed. (Code sec. 120)

(3) Estates and trusts are allowed all deductions which are allowed on the regular income tax return.

There is a post-war credit allowed of 40% of the Victory Tax in the case of married persons or a head of a family ($1,000 maximum for any one year) and 25% of the Victory Tax in the case of a single person ($500 maximum for any one year). There is also allowed for each dependent 2% of the Victory Tax, or $100 maximum for any one year. This credit may be taken immediately if the taxpayer has purchased defense bonds, paid life insurance premiums or reduced indebtedness in the amount of the credit.

Q. Suppose the total tax for 1943 is less than the amount due for 1942.

A. If the 1942 tax was greater than the 1943 tax, including the Victory Tax, the amount to be added to the 1943 tax is the sum of (1) the excess of the 1942 tax over the 1943 tax, and (2) if the tax for 1943 is more than $50, an amount equal to 25% of the 1943 tax, or the excess of the 1943 tax over $50 whichever is the lesser.

Q. What is the penalty for failing to file an estimate on time?

A. For failure to make the declaration and file it on time there is a penalty of 10% of the tax.

Q. Since the doctor's income varies in different quarters of the year how much leeway is allowed in estimating income?

A. A 6% interest penalty is imposed where the taxpayer substantially underestimates his tax, the purpose of which is to induce the making of reasonably accurate Declarations of Estimated Tax.

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# WARTIME GRADUATE MEDICAL MEETINGS

ALEX M. BURGESS, M.D.

The Author. *Alex M. Burgess, M.D., Rhode Island and American College of Physicians Representative on New England Committee for Wartime Graduate Medical Meetings.*

THE New England Committee for Wartime Graduate Medical meetings represents the combined efforts of the state medical societies of New England and the national committee for Wartime Graduate Medical Meetings sponsored by the American Medical Association, the American College of Physicians and the American College of Surgeons. The New England committee consists of members of the original wartime graduate committee of the Massachusetts Medical Society, representatives from the other state medical societies in New England and the members of District 1 and 2 as appointed by the National Committee. Representatives of the First Service Command (Army), the First Naval District and the Coast Guard are also serving with this Committee.

Following discussion meetings at Boston and Providence the Committee has consolidated Region 2, consisting of Rhode Island and Connecticut, with Region 1 which comprises the remainder of New England. By this action plans and progress will be uniform throughout the First Service Command. The Committee has also approached the question of type of meeting and has decided, in view of the large military and naval installations in this region, to conduct a three day meeting in Newport, R. I., as the first assembly for the medical officers in the armed forces serving at home stations. This meeting is planned at the invitation of these medical officers.

The Newport meeting will be held on September 14-15-16 at the Naval Hospital. The program as now planned calls for a one day presentation of medical subjects, one day of surgical subjects, and a day program to include subjects in various fields of medicine. Some twenty-five speakers will present papers for discussion.

In addition to the medical personnel at the Naval Hospital, the medical officers at the Naval Training Station, the Naval Torpedo Station, the Naval Air Station at Quonset, the Navy Construction Battalion at Camp Endicott, the Navy Fuel Depot, and at the coast artillery forts stationed in the defenses of Narragansett Bay, will be invited to attend the wartime graduate meeting. The total medical officer personnel in these installations is approximately 160.

In October the Committee hopes to hold a two or three day program at New London for the benefit of the installation there which includes the Naval Hospital, the Submarine Base, and a large group of Public Health Service personnel attached to the Coast Guard Academy and the United States Maritime Service. By special arrangement the medical officer personnel of the Coast Artillery in the Long Island Sound defenses at Fort Wright, Fort Terry and Fort Michie will also attend, as these posts have been assigned to Region 2.

At some later date a program will be planned for the staff of the Station Hospital at Bradley Field.

The committee arranging and directing the programs in the Rhode Island-Connecticut region consists of Creighton Barker, M.D., chairman, executive secretary of the Connecticut State Medical Society, Samuel C. Harvey, M.D., of New Haven, representing the American College of Surgeons, and Alex M. Burgess, M.D., of Providence, representing the American College of Physicians.

## LUXURY OF SOCIAL INSURANCE

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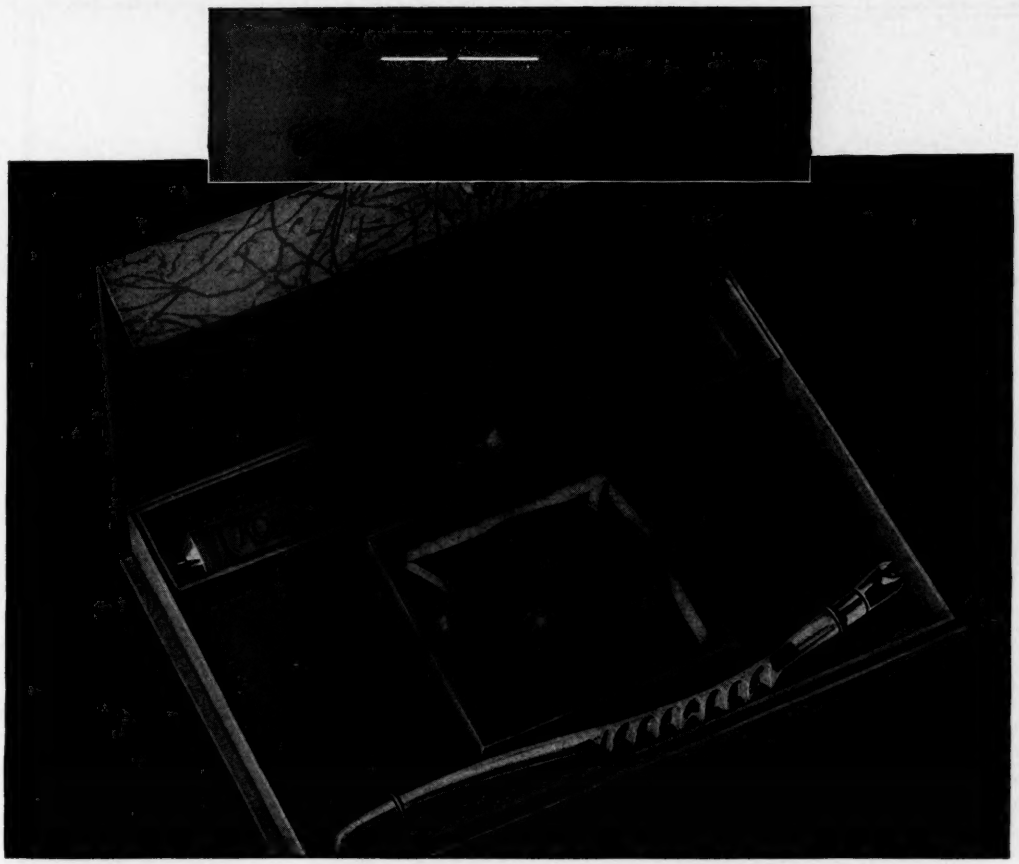
Broad discussion and resulting compromise between conflicting views is a part of the process whereby a democracy can win freedom from want. The program involves a positive approach to the leaders of all component groups of our society, especially management, medicine, labor and agriculture, to the end that all recognize their stake in the decisions and so far as possible agree in going before the people with constructive principles to guide the general discussion and to lay a foundation for an atmosphere in which we can effectively rebuild a sound economy. If responsible, temperate and intelligent leaders of each component of society realize the stake which each has in free private enterprise and understand the relationship between the economy and social security, then all Americans can look with optimism towards the future.



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# MEDICAL LIBRARY NOTES

COMMITTEE ON THE LIBRARY:
Herbert G. Partridge, M.D.; Samuel Adelson, M.D.; Adolph W. Eckstein, M.D.

## Library Additions

THE Librarian of the Rhode Island Medical Society Library announces the recent addition of the following books:

Directory of Hospitals and Convalescent Institutions Engaged in Work for Crippled Children in the United States of America. Elyria, Ohio, 1942.

*HEART*

Thomas J. Dry—A Manual of Cardiology. Phil., 1943.

*LIBRARY SCIENCE*

Handbook of Medical Library Practice. Chic., 1943.

*MALPRACTICE*

Louis J. Regan—Medical Malpractice.

*NUTRITION*

James S. McLester — Nutrition and Diet in Health and Disease. 4th ed. Phil., 1943.

*PHARMACOLOGY*

New and Nonofficial Remedies, 1943. A. M. A. Chic., 1943.

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1942. Chic., 1943.

### SPECIAL GIFTS

The Committee on the Library reports with appreciation the receipt of the following gifts to the Library during the past month:

32 bound volumes and unbound journals from Butler Hospital.

23 volumes from N. Darrell Harvey, M. D.

1 volume from Miss Mary Daboll.

### LIBRARY HOURS

On Tuesday, September 7, the Library resumes its regular schedule of hours. Until further notice the Library will be open from 9 a. m. to 5 p. m. on weekdays except Saturday, when it will be open from 9 a. m. to 12 noon.

## Book Reviews

*NUTRITION AND DIET IN HEALTH AND DISEASE*, by JAMES S. MCLESTER, M.D., Professor of Medicine, University of Alabama. *Published by* W. B. Saunders Company, Philadelphia, 1943.

This, the fourth edition of "Nutrition and Diet in Health and Disease", has 850 pages and brings the science of nutrition with its recent and striking advances up to date. The investigations of the last decade, impressions gained from the military draft and war effort with more recent and intensified nutritional studies and particularly the work and recommendations of the Food and Nutrition Board of The National Research Council has helped to put this science in its rightful and highly important place in the field of medicine.

The author of "Nutrition and Diet in Health and Disease" is one well known to, and respected by, the medical profession. His many years interest in metabolic disease and the fact that he has served as president and chairman of the Council on Foods and Nutrition of A.M.A., served on the National Research Council, and other important nutritional committees, makes him ideally qualified to speak authoritatively on the subject of nutrition.

Dr. McLester has arranged his subjects conveniently into two parts and thirty chapters. Part I thoroughly discusses the physiology or mechanism of digestion, and metabolism with its requirements, then brings up to date vitamins, mineral salts and water, followed by several practical chapters with many tables on food products, the normal well balanced diet, infant feeding and diets in pregnancy etc.

Part II is given over to nutrition in disease. This is divided into separate chapters as follows: deficiency diseases, diabetes, gout, obesity, and leanness, food poisoning and allergy, diseases related to the urinary tract, digestive tract, blood circulatory system, nervous system, joints, skin, and endocrine glands as well as chapters on febrile diseases, the feeding of the surgical patient and nutrition in industry.

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# NEWS FROM THE WAR FRONT

## INDIAN ODYSSEY

*(The following account of travel by train by one of our doctors in India was dispatched to a member recently)*

June 1, 1943

"Dear Doctor —

Back where I started from after two weeks of travel on Indian railroads and river boats. Quite different from the railroad in the United States. None of the comforts. Cars are very dirty. No drinking water; frequently none for washing. Travel very slowly and stop every four or five miles, so that you rarely travel more than 150 miles in twenty-four hours. Carry your own bedding to sleep on wood benches, which are leather upholstered and loaded with vermin. No facilities for checking baggage. Handle your own. I had all my belongings, trunks, tentage, bedding roll, suitcase, laundry bag with shoes, etc: There is a baggage car into which you can put baggage yourself or hire coolies to deposit it. Not checked or guarded. At next station if someone likes the looks of your suitcase he can easily pick it up and carry it out—no questions asked. Windows and doors must be securely barred at night. Once we forgot to lock one of the doors of one compartment and we woke at three o'clock in the morning to find a coolie wandering about inside. Coaches are continental style with doors on each compartment opening outside. No passageway from compartment to compartment.

The greatest inconvenience is the frequent changes. Each line runs a different gauge. The gauges run from a metre up to six feet. Sometimes you change twice a day and often have to cross rivers on ferries. Each change means lugging all your baggage across. No food available. Have to carry your own, or pick up odds and ends at some towns.

The best part of traveling around this way is that you do see the country and the people firsthand, both civil and military. I now realize how little of the newspaper propaganda you can accept as fact. Particularly the readable dramatized reports I used to read in ——— magazine. As you used to say about hysteria, all the conflicting reports and opinions are based on just an oasis of truth, and lots of imagination."

## NEWS FROM 'DOWN UNDER'

Australia is a long way from these Plantations and as a result we are pleased when we get news from Captain Morgan Cutts who is rounding out a year of service in the South Pacific. There is "very little exciting to report," according to Dr. Cutts, but we are strongly of the opinion that there has been much work done. Apparently the threat of malaria in a postwar world will be thwarted by the first hand experience our doctors are getting in the treatment of cases in tropical areas. The disease is the big problem in the Pacific war, and as Dr. Cutts reports it is getting so "that now anyone from the north is considered guilty of having malaria until proven innocent."

## ADVENTURE IN BURMA

Captain William L. Leet, MC, historian of the 48th Unit, will have plenty to report when he sits down to his task of recording the work and travels of the Rhode Island Unit. Our latest report from Dr. Leet had him off on a jungle adventure which took him a thousand miles ahead of the Unit on a medical research mission into Burma. He reports "the rainfall here is terrific—as many inches a day as there are towers at the R. I. hospital . . . but we've managed to keep our health pretty well for the most part."

## MILITARY ROUNDUP

Home for a brief furlough after long service in Alaska, Major Joseph C. Kent has departed for the warmer climate of Georgia where he takes over an assignment at the station hospital at Fort Benning. . . . It is Lt. Comdr. Edward H. McCaughey now, as the former Pawtucket Medical Association president has been commissioned and assigned to the Newport Naval Station. . . . Good news to report

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## *ANNOTATED BIBLIOGRAPHY*

### *LUNGS AND RESPIRATORY TRACT*

Gardner, Leroy U., M.D., "Report of the Director of The Trudeau Foundation—1941" in *The Fifty-Seventh Annual Medical Report of the Trudeau Sanatorium and the Thirty-Seventh Medical Supplement For the Year ending September 30, 1941, together with the Twenty-Fifth Collection of the Studies of the Edward L. Trudeau Foundation for Research and Teaching in Tuberculosis.*

On the last page, Dr. Gardner reports that work carried on at the Saranac Laboratories in 1941 has demonstrated that exposure to dust of glass wool involves no hazard for the lungs because this fibrous material is not inhalable.

"Fibrous Glass Insulation Not Harmful" in *The Philadelphia Navy Yard Beacon*, Vol. II, No. 15 (February 5, 1943), p. 2.

This article reports conclusions based on an investigation by the Bureau of Ships and the Bureau of Medicine and Surgery of the Navy Department. Final statement: "It is concluded from observations, investigations and available literature that there is no appreciable health hazard associated with the handling of fibrous glass and slag wool in the blanket or board form."

Entitled "Fibrous Glass Insulation: Health Aspects of," a report of the investigation is contained in a memorandum dated December 30, 1942 which is indexed as BUSHIPS S38-1 (3638) · EN28/A2-11 and BUMED FS/S38-1 (103).

### *SKIN*

Sulzberger, Marion B., M.D., and Baer, Rudolf L., M.D., with the technical assistance of Lowenberg, Clare, M.S., and Monzel, Hildegard, B.S., "The Effects of Fiberglas on Animal and Human Skin—Experimental Investigation" in *Industrial Medicine*, Vol. XI, No. 10 (October, 1942), pp. 482-486.

Report of clinical investigation of effects of glass fibers on the skin, in which the authors find: "All of the reactions observed were of a transitory and superficial nature."

Schwartz, Louis, Medical Director, and Botvinick, Isadore, P.A. Surgeon, Division of Industrial Hygiene, National Institute of Health, United States Public Health Service, "Skin Hazards in the Manufacture of Glass Wool and Thread" in *Industrial Medicine*, Vol. XII, No. 3 (March, 1943), pp. 142-144.

### *GENERAL HEALTH*

Siebert, Walter J., M.D., "Fiberglas Health Hazard Investigation" in *Industrial Medicine*, Vol. XI, No. 1 (January, 1942), pp. 6-9.

Report on investigation to determine whether manufacture or handling of Fiberglas involves any unusual occupational hazards.

"Ilgalator With Dust-Stop Filter Acceptable" in *Journal of the American Medical Association*, Vol. CXVII, No. 11 (September 13, 1941), p. 932.

Description of unit placed in window frame equipped with Fiberglas air filter to remove pollen from air entering room. Offers relief to hay fever victims.

W. G. Hazard, P.A. Industrial Hygiene Engineer (R), U.S.P.H.S., "Transcript of Remarks on Health Aspects of Fiberglas Materials." Excerpt from the Proceedings of the Rhode Island Industrial Health Institute, May 19, 1943. 4 pages. Copies available on request to Division of Industrial Hygiene, R.I. Dept. of Health, Providence.

The transcript concludes:

"The job of the industrial hygienist is to show manufacturers how they can use all manner of materials safely, without injury to any worker. In the case of Fiberglas, the danger is not real but imaginary. The following points might well be discussed with employees when they are hired, and periodically afterwards:

1. Breathing glass fiber dust is not harmful to the lungs.
2. Irritation of the skin is temporary, superficial, and not progressive.
3. No special personal protective devices or clothing need be worn, except that in overhead application of glass fiber, goggles are often desirable to protect against falling bodies.
4. Frequent washing and a daily shower with soap and warm water will readily remove most of the small fibers clinging to the skin and will reduce any 'itching'."

### *FIBERGLAS IN SURGERY*

Lewison, Edward F., Captain, Medical Corps, United States Army, "Rayable Gauze As a Factor of Safety in Surgical Operations" in *Bulletin of the American College of Surgeons*, Vol. XXVII, No. 1 (January, 1942), pp. 39-40.

Report on use of a strand of Fiberglas yarn as a tracer thread in surgical sponges. Writes Dr. Lewison: "Like glass, which is the basic constituent of its composition, this [Fiberglas] thread is chemically, physically, and biologically inert, yet unlike glass it is a thread of exceptional strength, soft texture, and remarkable plasticity . . . It was, therefore, almost inevitable that the hidden aptitudes of a specially prepared radio-opaque fiberglas yarn should be discerned and a thread developed which was permanently impenetrable to the X-ray and perfectly harmless to body tissue as well."

Schols, Roy Philip, M.D., and Mountjoy, Philip S., M. D. "Fiberglas Suture Material" in *American Journal of Surgery*, Vol. LVI, No. 3 (June, 1942), pp. 619-21.

Report on experimental use of Fiberglas sutures in animal and human surgery. Dr. Schols and Dr. Mountjoy write: ". . . Because Fiberglas is inert and non-reacting in the tissue, and practically insoluble, it does not cause exudation, edema, or cell proliferation; and it in no wise interferes with wound healing . . . It is not affected by tissue fluids, enzemotic action, or action of chemicals; neither does it produce toxins or allergic reaction. The fact that each fiber is an extremely fine, solid filament of pure glass, makes it non-absorbent, and in view of its being a non-irritant, it does not call forth tissue fluids which would harbor germ life."

"New Type Plasma Filter Will Aid in Prevention of Fatal Wound Shock" in *Surgical Business*, Vol. V, No. 5 (May, 1942), pp. 20-21.

Fiberglas tape used as filter in blood plasma transfusion apparatus.

### *HANDLING CHARACTERISTICS*

Rogers, Tyler Stewart, "Safe Practice in the Manufacture and Uses of Fiberglas," issued as *Safe Practice Bulletin No. 58* (February, 1940), in the Occupational Disease Prevention Series published at Harrisburg by the Pennsylvania Department of Labor and Industry.

Mr. Rogers reports: "Fiberglas is cleaner, holds together better, contains less 'dust' and foreign materials than the common rock wool and slag wool insulations used for over fifty years . . . Fiberglas employees have compiled an outstanding health record covering millions of man hours of handling Fiberglas products."

McIlvain, E. H., M.D., "Insulation in Stream-lined Trains," issued as *Safe Practice Bulletin No. 2* (1939) in the Occupational Disease Prevention Series published at Harrisburg by the Pennsylvania Department of Labor and Industry.

Dr. McIlvain reports: "Fiberglas provides the qualities generally sought as an insulation product in stream-lined trains and in addition has proven safe for handling purposes by our workmen."

Keiser, Hubert D., Major, A. U. S., "Use of Fibrous Glass by the Army and Navy," in *Mining Technology*, Volume VII, No. 3 (May, 1943), Technical Publication No. 1598 (Class H, Industrial Minerals Division, No. 107), pp. 1-14.

This is a reprint of an address delivered by Major Keiser in New York City on February 15, 1943, before a joint session of the American Society of Economic Geologists and the Industrial Materials Division of the American Institute of Mining and Metallurgical Engineers. The article contains a comprehensive description of manufacturing processes.

# INDUSTRIAL HEALTH

COMMITTEE ON INDUSTRIAL HEALTH
Charles L. Farrell, M.D., Chairman; Herbert E. Harris, M.D.; Stanley D. Davies, M.D.; Michael H. Sullivan, M.D.; William P. Buffum, M.D.

IN these days of rationing of food, fuel and even manpower, the physician is often called upon to supply statements regarding the need for additional gasoline, fuel oil or red ration points. He is also occasionally required to certify that a patient's welfare will be improved by changing jobs. Before issuing or signing such statements it is the duty of the physician, as a citizen having civic responsibility of his own, to satisfy himself that a definite need exists and that the situation seriously warrants his professional intervention. The physician who acquiesces to such a request merely to please the patient is seriously undermining the war effort. It should be realized by all that a great deal of time and effort have gone into the planning of our war economy. While it is admittedly not perfect it is designed to insure the welfare of the general mass of people.

The Committee on Industrial Health is particularly concerned with the situation regarding shifting jobs in industry. When an employee desires to change his occupation there are six conditions which may be applied to determine his eligibility for a Certificate Of Availability. They are as follows:

1. The worker is competent to perform higher skilled work than the present employer is able or willing to provide.
2. The worker is employed for a substantial period at less than full time.
3. The place of prospective employment is substantially less remote and the distance between the worker's residence and the present place of employment is unreasonably great, or customary transportation and facilities are not available.
4. The present employment is detrimental to the health, safety, or morale of the worker or his immmediate dependents.
5. The worker is discharged by his last employer.
6. The worker is laid off for an indefinite period or for a period of seven or more days.

The State Unemployment Commission carefully and thoroughly investigates the circumstances of each case and if the evidence presented warrants a change of employment it is granted.

Of late, however, the effort to be fair to all applicants has been jeopardized by the fact that an increasing number of employees are presenting a slip from the doctor stating that a change of occupation is needed. Up to now that has been taken at its face value but investigation shows in many instances that there is no improvement of working conditions at the prospective place of employment over the present employment. The doctor's certificate was merely used as a lever to force a Certificate Of Availability for which the applicant was otherwise ineligible.

We can sympathize with workers who desire to leave essential war jobs for personal aggrandizement but the medical profession must not be used as a tool to sabotage essential war industry. Ample safeguards have been established to insure justice to all workers and they do not need to rely on provision number four unless their physical condition is such that a definite clinical entity exists.

The Committee on Industrial Health has cooperated in devising a form to cover cases applying under provision number four, and all physicians are advised to give a thorough appraisal of the applicant's condition and decide in what manner the change in occupation will be beneficial. We realize that this means additional paper work and effort on the part of an already overburdened physician, but because in the past physicians have given their approval to changes on wholly inadequate evidence, it is necessary to revise the system. In doubtful cases it is suggested the physician gently but firmly remind the patient that obligations rest heavily on the physician's shoulders and that his certificates are subject to further review; therefore they must rest on solid facts. All certificates from physicians, whether for change of occupation, for additional red ration points, or for additional fuel oil coupons, will continue to receive respect from authorities only when given under proper auspices.

# FROM THE SECRETARY'S DESK

WILLIAM P. BUFFUM, M.D.

122 Waterman Street Providence

## SPECIAL CONFERENCE HELD

On August 18, at the invitation of Dr. Michael H. Sullivan, president of the Society, the Council met with the president and the secretary of each of the component district societies, and with the chairman of the state Procurement and Assignment committee. Called together to confer on the relationship of the State and the district societies, especially in regard to memberships, and also on the problems arising from a possible shortage of physicians during the coming months, the Conference evoked much thoughtful discussion. Recommendations stemming from the meeting will undoubtedly be considered further by the Council, and will be submitted to the House of Delegates at the September meeting.

## THE OPA AND THE MEDICAL PROFESSION

Recognizing the need for full cooperation by the medical profession, The Council agreed to view the case of any doctor who flagrantly violated the gasoline restrictions. From state OPA director, Christopher DelSesto, has come word of appreciation for this evidence of cooperation, and the further comment that "we realize the tremendous strain under which the members of the medical profession are now working and it should be our earnest hope in the Office of Price Administration that we can do whatever possible to ease the load of the medical profession. The complaints that we have received at this office concerning the members of the medical profession violating OPA regulations have been few."

Every doctor is strongly urged to continue this excellent cooperation.

## MASSACHUSETTS PRE-MARITAL LAW

The attention of members is called to the new pre-marital blood test law which has been enacted in Massachusetts. Essentially the same as the old law, the new act includes the following changes: (1) the examination shall be made only to ascertain the presence or absence of syphilis, and shall include a serological test for syphilis; (2) the health certificate need not be presented until the time of issuance of the marriage license, and the examination and laboratory test must be made not more than 30 days before the date the marriage license is issued; (3) the examination may be made by a physician registered or licensed to practice in any other State.

## LEGAL MEDICINE CONFERENCE AND SEMINARY

The Massachusetts Medico-Legal Society in conjunction with the department of legal medicine of Harvard Medical School will hold an all day conference at the Mallory Institute, Boston City Hospital, on October 6. Rhode Island doctors interested are invited to attend the lectures, demonstrations and informal discussions to be held. During the week October 4-9 the Harvard Medical School will offer a Seminar in Legal Medicine open to medical examiners and any other suitable graduate of an approved medical school.

## TAX FORMS

Income tax forms will be available to members at the executive office.

### MEETINGS IN SEPTEMBER

**_Thurs._ SEPT. 9—Kent County Medical Society. Regular meeting.**

**_Wed._ SEPT. 15—Council of R. I. Medical Society. At Hope Club, 7 p.m.**

**_Thurs._ SEPT. 16—Pawtucket Medical Ass'n. Regular meeting at 12 noon.**

**_Thurs._ SEPT. 23—House of Delegates of R. I. Medical Society. At the Medical Library, 8:30 p.m.**

**_Thurs._ SEPT. 23-_Sat._ SEPT. 25—R. I. Conference of Social Work. Annual meeting. At Providence.**

**_Tues._ SEPT. 28—Newport County Medical Society. Regular meeting.**

**_Mon._ OCT. 4—Providence Medical Ass'n. Regular meeting. At the Medical Library, 8:30 p.m.**

# MEDICAL ASPECTS OF CASH SICKNESS ACT

HUGH J. HALL, M.D.

The Author. *Medical Examiner, Rhode Island Cash Sickness Act.*

ANY DISCUSSION of the medical aspects of the Rhode Island Cash Sickness Act which has been paying benefits to claimants since April 1 must necessarily be prefaced with the information that the Act is a law of the state which requires cooperation of the medical profession for its successful operation. Basically this is a financial program whereby the loss of wages from employment due to illness is offset in part by cash payments from a fund created by payroll deductions from workers under the Cash Sickness Compensation Act. The law is nevertheless almost wholly dependent upon the medical certification of the private practitioner for its operation. For this reason every doctor must realize that he has an obligation to cooperate in the development of the program.

Thousands of claims have been viewed by the medical examiner and every effort has been made to give the claimants all the possible benefits due them as the result of the diagnosis reported by the private physician. The administering Board has been conscious of the many demands upon the time of the doctors of the State and has endeavored to simplify the medical certification report forms. In the beginning many reports of diagnosis were incomplete and the forms had to be returned to the doctor for further information. Thus, because of experience acquired we have revised the claim forms and we have made the reporting less tedious for all parties concerned.

### *Disability Must Totally Incapacitate*

By regulation of the Unemployment Compensation Board provision has been made for the medical examination of all applicants, including those filing initial claims and for those receiving benefits when the time allowance for disability granted by the medical director has expired and continued benefits are sought. The Board is of the opinion that it is fair to the claimant as well as to the State for these people to be examined by the medical staff before any benefit or extension of benefit, as the case may be, is granted. There is no desire to avoid just claims, but after seeing the patient and personally examining him the medical staff is in a better position to judge the disability. When special conditions arise claimants are sent to a specialist in the particular field.

In this connection it should be carefully noted by every doctor that the wording of the Sickness Act stipulates that "an individual shall be deemed sick in any week in which, because of his physical or mental condition, he is unable to perform *any services* for wages." This actually means total incapacity, and it should be brought to the attention of patients who seek the doctor's signature to a certificate of illness. The doctor should have no hesitation in refusing to sign forms for patients in whom he detects no disability which would be serious enough to prevent any work whatever.

### *Basis for Judging Claims*

In judging claims for benefits the following factors are considered: (1) a complete diagnosis, (2) the age of the patient, (3) the type of work pursued by patient, (4) the first day of sickness, (5) the last day worked, (6) special attention to surgical cases.

In surgical cases a definite number of weeks are allowed provided there are no complications. The present schedule is as follows: Appendectomy—6 weeks; hernia — 6-8 weeks; gall bladder — 6-8 weeks; hysterectomy—6-8 weeks; vaginal repair —8 weeks; thyroidectomy adenoma—4 weeks; thyroidectomy toxic — 6 weeks; hemorrhoid—4 weeks. In all such cases the age of the claimant and his type of work are vitally important and are given careful consideration.

Reports of sacro-iliac strains have been very numerous, especially with workers in heavy industries. Many such claimants, as the result of amendments to the Sickness Act this year, are able to receive workmen's compensation benefits along with the cash sickness payments and it has been the experience of the medical staff in examining such persons that there is a tendency on the part of the majority to prolong their illness. Our policy has been to allow a definite period for this condition and

after this time the claimant is called in and given a physical examination and if he is found to be able to work the claim for further benefits is denied.

### *Special Problems*

There are several special problems I should like to call to the attention of the doctors. One concerns the situation where the doctor does not wish the patient to know the diagnosis for fear of upsetting him mentally. In such instances kindly inform the medical director by personal letter giving the patient's *social security number* and further benefit payments will be allowed and the patient will not have to come in for an examination.

Again, many of the claimants coming in for examination after the period of disability has expired show a different ailment from that originally described by the private physician. Hence it is important that every doctor be careful to note on the weekly report form if any change has occurred in the type of ailment subsequent to the initial report. The medical staff of the Compensation Board has to judge the claims on the basis of the private doctor's diagnosis and if other symptoms are present at the time of a review examination by the staff it is necessary to request the claimant to file a new form.

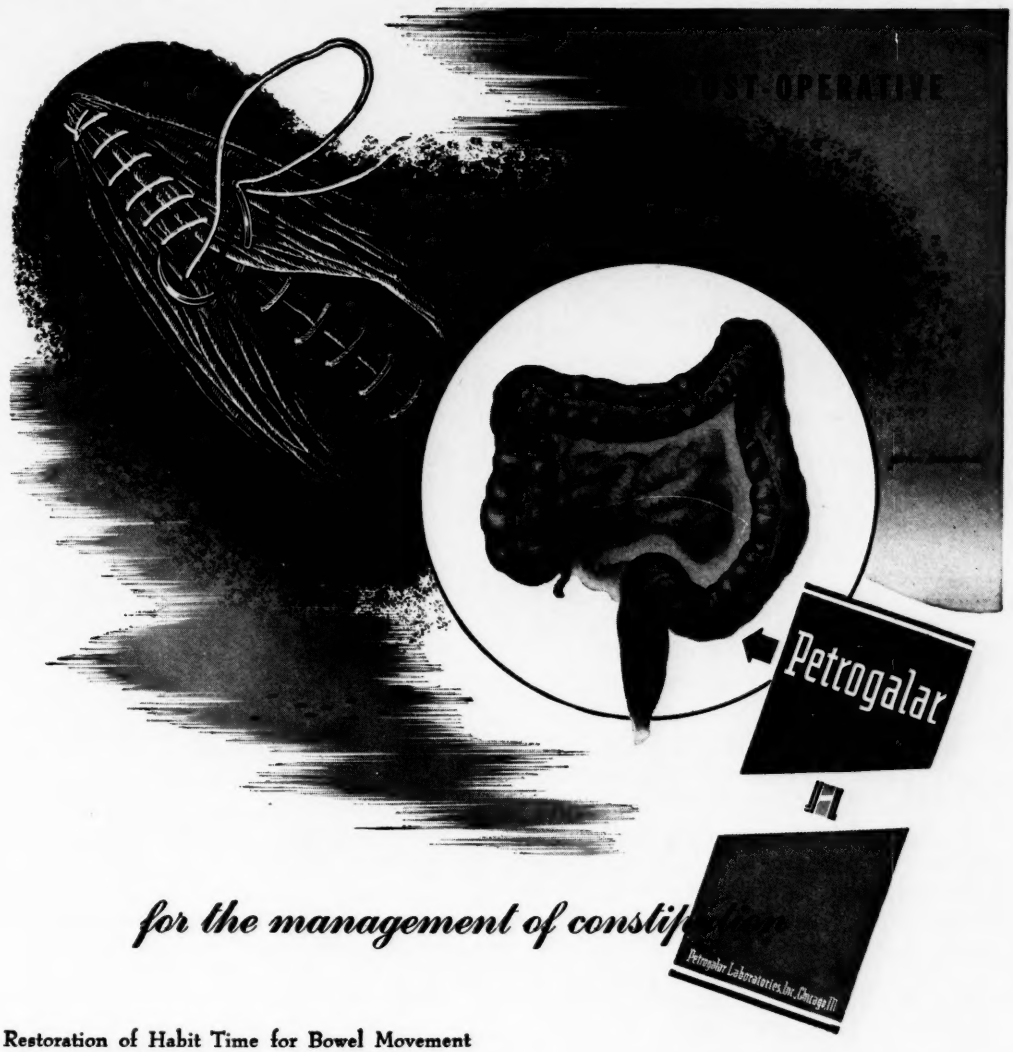
Finally, there has been an increasing number of reports of a "run down condition" due to overwork, and it is only by examination that we discover a blood pressure running from 190-240 which is not always reported by the private doctor. We ask that such information be added to the diagnosis in these cases. Likewise, if the doctor would send in the blood count and hemoglobin in cases of anemia the examining board will be in a better position to evaluate the claim and make the full allowance of benefits.

The medical staff of the board consisting of the director, and Drs. Henry Triedman and Raymond Luft, is aware of the many and varied problems facing the medical profession of the State and the Unemployment Compensation Board for the successful operation of the cash sickness act. In asking the complete cooperation of the doctors we assure them of our desire to be of service in every instance, and we will welcome assistance and communications relative to claims for benefits under the act that the entire program may prove as beneficial as possible to the citizens of Rhode Island.

## NEWS FROM WAR FRONTS

*continued from page 173*

is the Navy announcement that Ensign Phillip H. Sanborn, son of Dr. and Mrs. Harvey B. Sanborn of Rumford, missing since the fall of Corregidor, is alive, though a prisoner of the Japanese. . . . After several cross country assignments Captain Alfred Mellucci has been located at San Diego with the medical department of the Aviation Cadet Examining Board. . . . From the Pacific area comes a brief message from Major Wallace Pianka who states he "has been thankful to some one for a foxhole more than once." . . . Latest recruit, according to our records, to answer the call for military duty is Dr. Maurice N. Kay, who reported to the 4th Service Command at Atlanta on August 24. . . . If the postwar world is to be featured by aerial service then Lt. Comdr. H. Frederic Stephens will have a wide edge on his colleagues, for he wears the Navy wings, having gone through the flight school at Pensacola. . . . Captain John Dziob and Lieut. Hubert Holdsworth, both with the 48th in India, now have extra special reasons to get back to these Plantations in a hurry—both have acquired heirs within the past month!

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## BOOK REVIEWS

*continued from page 171*

Completing the book is a 60 page appendix taking up relative values and technic of special methods of feeding, the processing and storing of foods, methods of cooking and finally complete tables on the composition of foods and beverages with fuel, calorie, vitamin, and mineral values.

The importance of a thorough understanding of nutrition in Health and Disease is impressed upon us when we pause to consider that throughout the world today the incidence of nutritional diseases and all that follows, is multiplying into staggering figures due to the war. Our medical problems are becoming more and more closely linked up with nutritional problems.

This book then would seem very timely and should prove of great value to the entire medical profession, to the student of the biological sciences, to the dietitian, and also become an excellent book for nurses.

ELIHU S. WING, M.D.

*REHABILITATION OF THE WAR INJURED* — A Symposium. *Edited by* WILLIAM BROWN DOHERTY, M.D. and DAGOBERT D. RUNES, PH.D. Philosophical Library, New York, 1943.

This admirable volume is a compilation of reprints from United States and British medical journals, together with one from a Russian source. The book is divided into the following subjects: Neurology and Psychiatry, Reconstructive and Plastic Surgery, Orthopedics, Physiotherapy, Occupational Therapy and Vocational Guidance, and the Legal Aspects of Rehabilitation. A final chapter deals with the Vascular and Neurologic Lesions in Survivors of Shipwreck.

The authors are authorities in the special fields which are described, and the editors have made a wise and judicious selection both as to material and writers. Rehabilitation covers a wide range of medical practice, as witness articles on "Refinements in Reconstructive Surgery of the Face" and "Employment of Epileptics".

The paper and type are of excellent quality but the value of the book is greatly impaired by the inferior quality of the illustrations. Half-tone reproductions of photographs in many instances are so indistinct as to be of little service in evaluating the results of treatment. This blemish is conspicuous in such a subject as facial reconstruction, where a clear cut reproduction of the original is essential.

In spite of these faults the book will prove of great value to all practitioners who will take part in the greatest rehabilitation of war injured in history, — and that means a sizable proportion of the medical profession.

ROLAND HAMMOND, M.D.

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## ESTIMATING INCOME TAX

*continued from page 167*

However, a 20% tolerance is allowed, which means that the interest penalty does not apply unless the amounts paid during the year were less than 80% of the amount finally shown to be due. The interest is imposed on the total amount of the underpayment, not just the amount below 80%. As a practical matter, the penalty can be avoided in most cases by the filing of a revised declaration December 15, when the income and deductions for the year can be estimated with substantial accuracy, and by adjusting the final quarterly installment to take account of the change made.

Q. What about estimates on credits?

A. Your estimate must include an estimate of credits allowed for 1942 income tax payments made in March and June of 1943, income taxes withheld at source (wages or salaries), credits on tax-free covenant bonds, and credits for income taxes paid to a foreign country. Your *actual* estimated tax will be the difference between your combined estimate of income and Victory taxes less any credits of the nature just listed.

Q. What about the doctor who has entered the military service?

A. The doctor who has left the community for service with the armed forces constitutes a special problem as regards the filing of income tax returns. Both the Army and the Navy have issued special pamphlets for their personnel to explain the tax rulings.

Q. Should the doctor use the short form or the detailed form in filing his estimate?

A. The short form is more convenient provided the doctor is in a position to accurately list his net income, although it allows but 8% on the net income for deductions. In all probability the doctor will find it to his advantage to use the regular form which allows him to give a detailed list of deductions and thereby arrive at a more accurate estimate of his income and tax.

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# Rhode Island
# MEDICAL JOURNAL
## OCTOBER 1943


**First publication of an outstanding report on the treatment of "BURNS", by Charles C. Lund, M.D., of Boston by permission of the Committee on Medical Research of the Office of Scientific Research and Development** ..... *Page 197*


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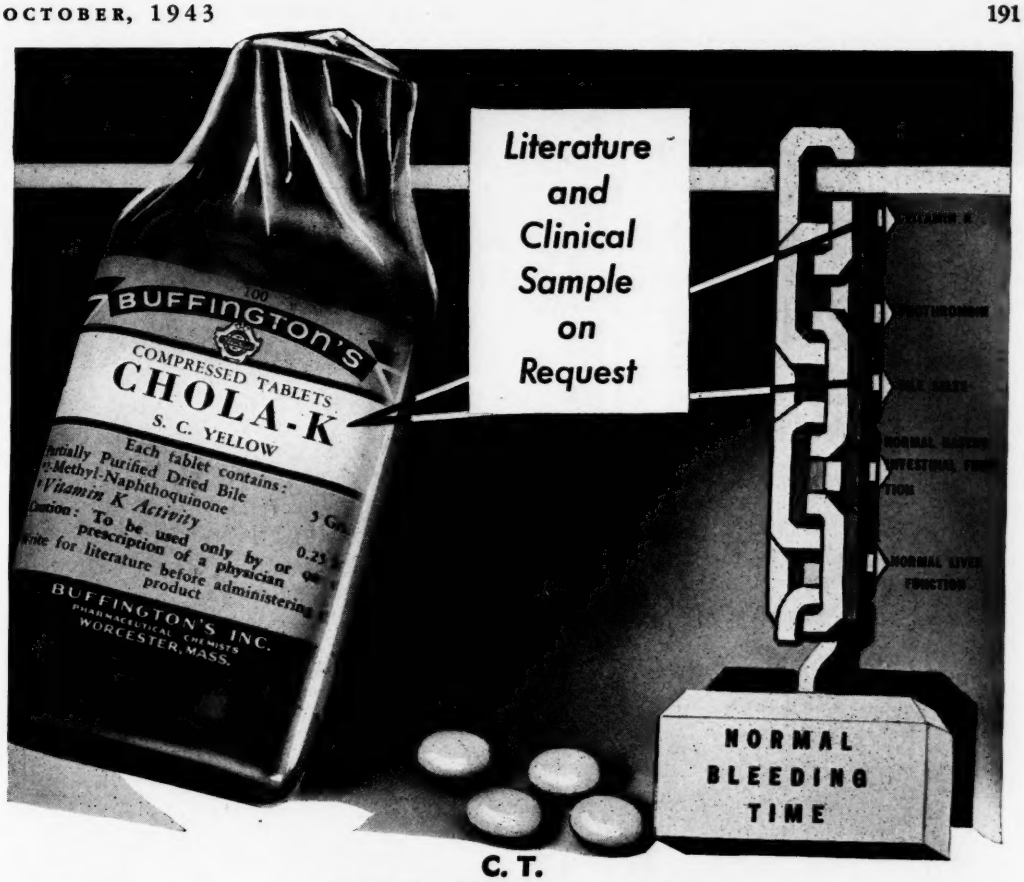
**THE RHODE ISLAND MEDICAL SOCIETY**




C. T.

# CHOLA-K

**S. C. YELLOW**

## *Indications*

- Primary Dietary Deficiency of Vitamin K
- Obstructive Jaundice
- Hemorrhagic state associated with Primary Hepatic Disease
- Hemorrhagic conditions of Ulcerative Colitis, Sprue and Celiac Disease
- Hypoprothrombinemia of the Newborn

## *References*

AGGELER, P. M. and LUCIA, S. P.: The Bleeding Tendency in Diseases of the Liver and Biliary Passages, Acta Medica Scandinavica, 107:179 May 1941.

TOWNSEND, STUART R. and MILLS, EDWARD S.: The use of Vitamin K and Bile Salts in the prevention and control of the Hemorrhagic Diathesis in Obstructive Jaundice, Canadian Medical Association Journal, 41:111 August 1941.

ABBOTT, W. E. and HOLDEN, W. D.: Hypoprothrombinemia in Intestinal Disorders, American Journal of Surgery, 53:215 August 1941.

TOWNSEND, STUART R. and MILLS, Edward S.: Hemorrhagic Tendency Associated with Prothrombin Deficiency and its treatment with Vitamin K and Bile, Canadian Medical Association Journal, 42:541 June 1940.

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